



# The Big Bend Paisano

The official newspaper  
of Big Bend National Park &  
Rio Grande Wild & Scenic River  
Volume 23, No. 2 Summer/Fall 2002

J. Fenstermacher

## Discover Big Bend!

Welcome to Big Bend National Park and the Rio Grande Wild & Scenic River! Big Bend is one of the largest and least visited of America's national parks. Over 800,000 acres await your exploration and enjoyment. From an elevation of less than 2,000 feet along the Rio Grande to nearly 8,000 feet in the Chisos Mountains, Big Bend includes massive canyons, vast desert expanses, and the entire Chisos Mountain range. Here, you can explore one of the last remaining wild corners of the United States, and experience unmatched sights, sounds, and solitude.

There are as many ways to enjoy Big Bend as there are people who visit. The diversity of recreational options here offers something for almost everyone.

While many visitors are content to enjoy Big Bend from the comfort of the paved scenic drives, others with rugged vehicles prefer the challenge and remoteness of the park's many unimproved dirt roads.



Any park ranger will tell you that neither desert nor mountains will truly reveal themselves to a motor vehicle. To experience the best of Big Bend, you should get out on foot, if only for a short time, and become part of the landscape.

Listen to the desert silence, smell the creosotebush, and gaze towards a distant mountain range, and you will soon realize how special this place is.

Floating the Rio Grande in one of the park's three canyons will take you into yet another world far removed from the open expanses of desert and mountains. Here, the sky above is merely a sliver of blue framed by vertical walls of towering limestone.

In this issue of the Big Bend Paisano, we explore the many methods of enjoying the wilds of this magnificent park. Whether you enjoy your visit by car, jeep, foot, horse, bike, canoe, or even from a lawnchair, Big Bend National Park is yours to discover.

### 7 Backcountry



A. Foster

### 8 Touring Guide



B. Chambers

### 9 Big Bend Trails



K. Tipler

## What's Inside

Welcome.....	2
Bookstore.....	3
Park News.....	4
Rio Grande.....	5
Wildlife.....	6
Backpacking.....	7
Touring Guide.....	8
Hiking Trails.....	9
Backcountry Driving.....	10
Biking Big Bend.....	11
General Information.....	12
Backcountry Planning.....	13
Park Map/Phone #s.....	14
Safety Tips.....	15

### IN CASE OF EMERGENCY

Park Rangers are available to provide assistance. Dial 911 or (915) 477-2251

Phones are located at:  
visitor centers,  
campgrounds,  
Camper Stores, and the  
Chisos Mountains Lodge.

**911**



The Paisano, Spanish for roadrunner, is published by the National Park Service and the Big Bend Natural History Association for the orientation and education of visitors to Big Bend National Park

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The National Park Service was established on August 25, 1916. . . *"to conserve the scenery and the natural and historic objects and the wild-life. . . and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."* As conservation educators, the Division of Interpretation provides guided walks, talks, evening slide programs, workshops, and other educational activities as well as written materials such as this newspaper.



The Big Bend Natural History Association, established in 1956 as a private, non-profit organization, champions the mission of the National Park Service in facilitating popular interpretation of the scenic, scientific, and historic values of Big Bend and encourages research related to those values. The Association conducts seminars and publishes, prints, or otherwise provides books, maps, and interpretive materials on the Big Bend region. Proceeds fund exhibits, films, interpretive programs, seminars, museum activities, and research.

On matters relating to this publication:  
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The National Park Service cares for special places saved by the American people so that all may experience our heritage.

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## Superintendent's Welcome

## Welcome

Welcome to Big Bend National Park and the Rio Grande Wild and Scenic River, two unique areas of the U.S. National Park System in the state of Texas. At over 800,000 acres, Big Bend National Park encompasses the largest protected area of the Chihuahuan Desert in the United States. The Chihuahuan Desert is the largest on the North American continent, extending from Old Mexico to New Mexico. The Rio Grande is the major lifeline in this desert and for 1,250 miles along the southern boundary of Texas, it forms the international boundary between the United States and Mexico. One hundred ninety-six miles of this section of the Rio Grande have been designated as the Rio Grande Wild & Scenic River.

Since the establishment of Big Bend National Park in 1944, and the Rio Grande Wild & Scenic River in 1978, millions of visitors have safely enjoyed the diverse recreational opportunities here. As you'll soon discover, this is a huge place and your recreational options are many. Don't know where to begin? Browse through this issue and stop by a visitor center with any questions you may have. Our dedicated park rangers and volunteers are here to assist you in planning your Big Bend adventure. Whether by car, foot, boat, or bike; whether this is your first visit, or your twenty-first, we hope your stay is a safe, enjoyable, educational, and memorable one. Experience your America!

Frank J. Deckert, Superintendent



Superintendent Deckert

## Bienvenidos

Bienvenidos al Parque Nacional Big Bend y el Silvestre y Escénico Río Grande, dos áreas únicas del sistema estadounidense de parques nacionales dentro del estado de Texas. Con un tamaño de más de 800,000 acres, el Parque Nacional Big Bend encuadra el área protegida más grande del desierto Chihuahuense dentro de los Estados Unidos. El desierto Chihuahuense es el más grande de Norte América, extendiendo de México a Nuevo México. El Río Grande es la fuente de vida de este desierto, y sobre 1250 millas sirve como la frontera internacional entre los Estados Unidos y México. Ciento noventa y seis millas de este río son designados como el Silvestre y Escénico Río Grande.

Desde el establecimiento del parque nacional Big Bend en 1944 y el Silvestre y Escénico Río Grande en 1978, millones de visitantes han gozado sin accidente de las diversas oportunidades de recreo. Tanto que

descubrirá, el parque es inmenso y sus opciones para el recreo son amplias. ¿No se sabe dónde empezar? Lea este numero del *Paisano* y visite uno de los centros de visitantes con cualquier pregunta. Nuestros dedicados guardaparques y voluntarios están aquí para servirle y asistirle planificar su exploración del parque. Que sea por vehículo, barco, bicicleta, o a pie, esperamos que su visita sea segura, educativa, y memorable. ¡Conoce su América!

Frank J. Deckert, Superintendente

## Volunteer Honor Roll



Each year, volunteers contribute thousands of hours to the National Park Service. A vital supplement to paid staff, volunteers bring special skills, dedication, and fresh approaches to our work in interpretation, visitor protection, maintenance, administration, and resource management.

Join us in thanking the following individuals and organizations who have recently donated 100 or more hours in volunteer service to Big Bend:

Barbara & Bill Baldwin  
Justin Goldwater  
Jackie & Ralph Headlee  
Ginny & Jim Herrick  
Fran & Bernie Heyman  
Jim Hines  
Joan & Jack Lamkin

Dan Leavitt  
Steve McAllister  
Heather McCarthy  
Missy Powell  
Dori & Tom Ramsay  
Meg Thomson  
Wilderness Volunteers



Big Bend's latest Volunteer Appreciation Nite!

## Did You Know...



Park animals are wild. Do not feed or approach any of Big Bend's wildlife. Enjoy animals at a safe distance and allow them to find their own natural sources of food.

Do not remove any natural objects from the park, including rocks, cactus, reptiles, and fossils. Collecting specimens of any kind or defacing park features deprives other visitors. Leave everything as you found it for others to enjoy. If you must collect something, pick up litter!

All bicycles, including mountain bikes, must remain on paved or unpaved roads. They are not allowed on hiking trails or off-road.

Motor vehicles must be licensed and street-legal. All motor vehicles must stay on established roadways open to public travel. Vehicles are not permitted off-road.

## It's Up to You...

National parks have been described as the crown jewels of the United States. While enjoying the beauty of Big Bend National Park, please remember that few other nations have parks that can compare to those of the United States. They are something to be proud of. They are something to preserve.

Over 300,000 people come to experience Big Bend's deserts, mountains, and canyons each year. The protection of Big Bend National Park is ultimately in the hands of the people who visit it. Your cooperation with park rules is one way to help ensure the park's survival.

Please, treat **your** park with care.





*The Big Bend Natural History Association is a non-profit organization established to support the park's educational and scientific programs. BBNHA also publishes and distributes books, maps, guides, newspapers and other materials designed to enhance visitors' enjoyment and understanding of Big Bend National Park.*

This should be an exciting fall for BBNHA. In September, our board of directors will meet in Lajitas for our annual meeting and stay an extra day to have a facilitated planning session to set priorities for the next three years. We are considering some exciting projects.

One of those is to publish the journals and photographs of Robert T. Hill, who ran the Rio Grande from Presidio to Langtry in 1899 for the United States Geological Survey. We believe that photographically comparing his experience on the Rio Grande more than one hundred years ago with the experience available today will make a powerful statement about the effect we have had on this delicate environment. Our initial plan calls for us to publish a deluxe hardcover edition of this book and sell it as a fundraiser. The money could be used to aid a coalition of concerned citizens, environmental groups and government agencies on both sides of the river who are interested in restoring the Rio Grande to its former grandeur.

In May, our board of directors approved the purchase of an electronic point of sale system for our bookstores. Our present manual system of inventory control was established in 1976 when our annual sales were approximately \$18,000. Last year our sales exceeded \$400,000 in our six bookstores, and an up-to-date system of control is much needed. We hope that the cost will be offset by better service to you, our customers, increased efficiency in our internal operations, and a decrease in inventory losses, which will enable us to give more of our profits back to the parks we serve.

Thank you for your continuing support.

*Mike Boren*  
Mike Boren, Executive Director

## Featured Publications



Surround yourself with the abundant and diverse natural and human history of Big Bend. Our bookstores offer a wealth of books, maps, checklists, and field guides carefully selected to help you enjoy your visit to Big Bend National Park.

Stop by any visitor center, or order these online at [www.bigbendbookstore.org](http://www.bigbendbookstore.org)

### Down to Earth at Tuff Canyon

Geologist Daniel Barker produced this for the University of Texas Bureau of Economic Geology as part of their acclaimed "Down to Earth at..." series. The formation of the canyon, formed by Blue Creek as it drains the Chisos Mountains and cuts through volcanic ash near the Ross Maxwell Scenic Drive, is described in layman's terms and thoroughly illustrated. A window into Big Bend's tumultuous, volcanic past. 40 pages. \$14.95

### Quicksilver—Terlingua & the Chisos Mining Company

Historian Kenneth Ragsdale vividly tells the story of the discovery, exploitation, and decline of the mercury, or "quicksilver," resources in what is now Big Bend National Park and the Terlingua area. It includes many colorful characters, danger and suspense, the advance of technology, great gains and greater losses. An important book for understanding Big Bend. 327 pages. Special Price \$7.95

### Hiking Big Bend National Park

A comprehensive guide, written in cooperation with National Park Service rangers, this book describes 44 of the most popular hikes in the park, plus three hikes in Big Bend Ranch State Park. Each description includes trailhead location, difficulty, elevation changes, and maps needed. 171 pages. \$12.95.

### A Road Guide to the Geology of Big Bend National Park

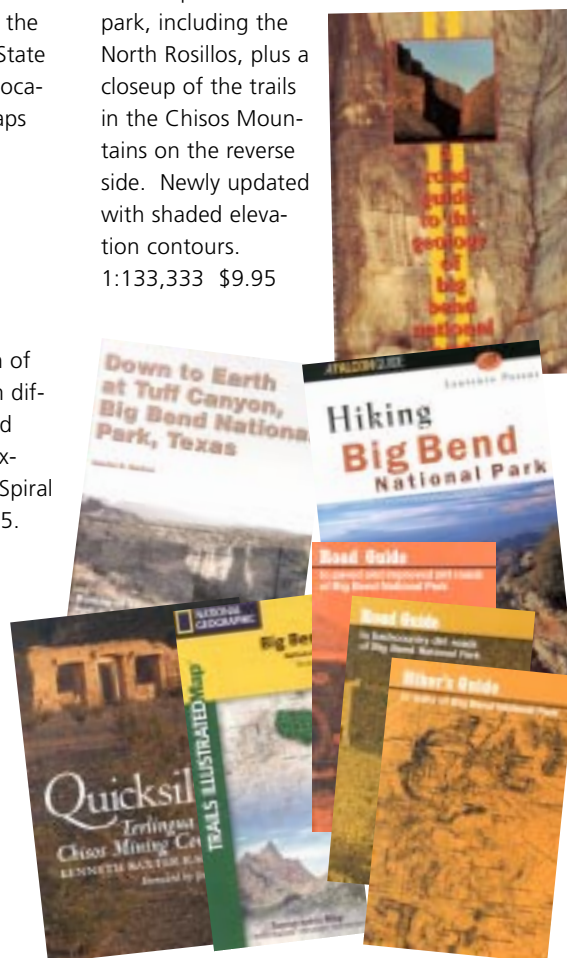
The book is divided into six sections, each of which describes the geology as seen from different drives in the park. Volcanic ash and igneous dikes, faults and alluvial plains, explained with sketches and color photos. Spiral bound for easy reference. 74 pages \$6.95.

### Park Guides Collection

Special store price when you purchase all three—the *Hiker's Guide to Trails of Big Bend National Park*, *Road Guide to the Paved and Improved Roads of Big Bend National Park*, and *Road Guide to the Backcountry Dirt Roads of Big Bend National Park*. These best-selling guides are the perfect starting place for either your first trip to Big Bend or your Big Bend library. All three for just \$5.00.

### Trails Illustrated Map of Big Bend

Printed on both sides of tear-resistant plastic, the map covers the entire park, including the North Rosillos, plus a closeup of the trails in the Chisos Mountains on the reverse side. Newly updated with shaded elevation contours. 1:133,333 \$9.95



## Seminars

Join a subject matter expert and discover Geology, Birding, Black Bears, and Dinosaurs in the 2002 Big Bend Natural History Seminars Program. Now in its 14th year, the immensely popular program sponsored by BBNHA continues to grow and improve.

### Fall, 2002 Seminar Schedule

<b>Sept. 28-29</b> <i>Mark Adams</i>	<b>Big Bend Birds</b>
<b>October 12</b> <i>Sam Richardson</i>	<b>Big Bend 101</b>
<b>November 9</b> <i>Raymond Skiles</i>	<b>Black Bears</b>
<b>November 10</b> <i>Billy Pat McKinney</i>	<b>Desert Tracking</b>
<b>November 16</b> <i>Bill Bourbon</i>	<b>Geology Jeep Tour</b>
<b>November 17</b> <i>Anthony Fiorillo</i>	<b>Dinosaurs!</b>

Average cost for a seminar is \$50 per day with most seminars running 1-2 days. Class size is limited to 15 participants to ensure individualized instruction. Seminar participants may also take advantage of free camping in one of Big Bend's group campgrounds.

To register for a seminar or to receive a complete catalog, contact us at PO Box 196, Big Bend National Park, TX, 79834 or call 915-477-2236. You may also e-mail us at [bibe\\_bbnha@nps.gov](mailto:bibe_bbnha@nps.gov)

## Overflow Camping Discontinued

In the past, when designated park campground sites became full during Big Bend National Park's busiest times, an overflow camping area was opened at Rio Grande Village for late arriving visitors. After serious consideration about visitor safety and improving visitor experiences, park officials have decided to discontinue overflow camping.



The practice of opening overflow camping began many years ago when other alternatives outside of the park were limited. Today, there are numerous privately owned and state run campgrounds and hotel accommodations west and north of the park.

The overflow camping area offered visitors only a one-night option that provided low quality and unsafe camping experiences for the same cost as the designated campsites (\$8 nightly). It promoted stressful situations, numerous complaints, and occasional disruptions with nearby campers who were too closely situated in one small, grassy area. In addition, the overflow area offered no regular campground amenities such as designated roads, defined campsites, picnic tables, grills, overhead shelters, or running water.

Big Bend National Park will continue to maintain its three designated campgrounds, which will remain on a first-come/first-served basis. Rio Grande Village Campground offers 100 sites, Chisos Basin Campground offers 63 sites, and Cottonwood Campground offers 31 sites. There are also 12 group campsites within these three campgrounds that may be reserved in advance by parties of 10 or more. In addition, the National Park Service offers 72 primitive backcountry road campsites, 43 primitive backpacking campsites, and numerous open-zone backcountry camping areas that are all free of charge and available by permit.



## Advisory! Border Crossing Conditions Have Changed...

Entering the United States at other than an authorized border crossing point is illegal. The closest legal ports of entry are at Del Rio and Presidio, Texas.

If you reenter the United States at any point within Big Bend National Park, you may be liable for a fine of not more than \$5,000 or imprisonment for up to one year, or both.

Please consult Park Rangers for latest updates.

## Big Bend Live!

Magnificent sunsets, fiery sunrises, and the continuously changing play of light on the Deadhorse Mountains are now visible from your home computer! Log onto the official Big Bend National Park Website and you can see what park employees get to see everyday...the view looking southeast from park headquarters, updated every 15 minutes.



pretty pictures. There are great concerns over Big Bend's deteriorating air quality. This webcam is one of many instruments now continuously monitoring visibility in the park. Site visitors can now access real-time

readings on visibility, ozone levels, and even archived images of each day.

Click over to [www.nps.gov/bibe](http://www.nps.gov/bibe) and check it out!

## Proud Park Partners

### Enhancing Visitor Understanding & Resource Conservation



Big Bend Natural History Association (BBNHA) and Friends of Big Bend National Park (FBBNP) donated a total of \$180,490 to Big Bend National Park during fiscal year 2002 (October 1, 2001 through September 30, 2002) for the benefit of park resources and visitors. National Park Service's set funding progressively becomes more strained each year due to inflation. Support from BBNHA and FBBNP helps the park obtain necessary tools to conduct interpretation, education, and research activities, picking up where the federal dollars leave off.

The park's oldest partner, BBNHA, was established in 1956 as a nonprofit organization for the purpose of providing support and assistance to the interpretive and scientific efforts of the National Park Service at Big Bend National Park and Amistad National Recreation Area. This goal is accomplished through bookstore outlets and Internet sales of educational materials. Contributions to Big Bend of \$93,986 this year include: contracting for a new park video, fabricating a new outdoor exhibit, printing the park's new business plan, park brochures, and newspapers, supporting the *Good Neighbor Day Fiesta*, purchasing park library books and subscriptions, assisting with rent for volunteers, funding environmental education and Junior Ranger programs, supporting the training of temporary staff, maintaining the park's slide file system, purchasing interpretive supplies, and aiding in the park's research activities. For 46 years, BBNHA has assisted Big Bend National Park in important conservation and education endeavors by contributing almost \$1,500,000 from sales proceeds.



Big Bend Natural History Assn.  
PO Box 196  
Big Bend National Park, TX 79834  
[www.bigbendbookstore.org](http://www.bigbendbookstore.org)

Since 1997, the FBBNP has been actively engaged in nonprofit fundraising for specific science and resource management



Water quality sampling with equipment donated by FBBNP

projects, trails improvement projects, and educational, interpretive, and visitor service projects that provide the highest levels of visitor understanding and resource conservation. This year alone, they have donated \$86,504 to Big Bend for the following projects: printing of the park's new business plan, purchasing a new global positioning system, fabricating five new outdoor exhibits, hiring a seasonal wildlife technician, conducting a Black-capped Vireo survey, improving hiking trails, and conducting the *Chihuahuan Desert Symposium*. Over the last five years, FBBNP's specialty state license plate program has supported many park projects and the group's total contributions to date are \$151,164.

The boards of directors of both BBNHA and FBBNP are busy, dedicated volunteers who are committed to supporting, promoting, and raising funds for important park projects. Their collaborative efforts and the generous contributions of their members are but a reflection of their care and concern for this national treasure. Without their valuable contributions, service to park visitors could not be maintained at a level to which they have become accustomed.



Friends of Big Bend National Park  
PO Box 200  
Big Bend National Park, TX 79834  
[www.bigbendfriends.org](http://www.bigbendfriends.org)



# The Majestic Rio Grande is in Trouble

Ranger Doug Thompson

For millions of years, the Rio Grande has been one of the greatest rivers of North America. In the Big Bend region, its majestic flow has helped to create a truly fantastic landscape, slowly wearing away thousands



E. Guerrant

of feet of rock to produce three of the world’s most spectacular and awe-inspiring river canyons. (The canyons prompted

an unknown, early visitor to call the Big Bend a place “where the big river is kept in a stone box”). In an otherwise dry and seemingly barren desert, the Rio Grande has produced a sparkling ribbon of water and lush, green vegetation teeming with fish, birds and other forms of wildlife.

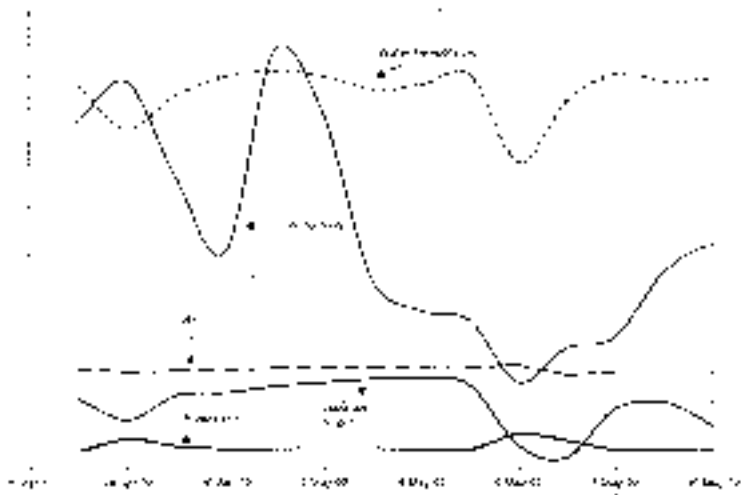
Unfortunately, over the past one hundred years, the Rio Grande has changed dramatically. Today, it is little more than a shadow of its former self. Impoundment, irrigation and other human uses have reduced its flow dramatically, until it no longer floods in a natural, predictable cycle (something that is extremely important to both vegetation and wildlife), and its silt often is mingled with agricultural chemicals. A hundred years ago, people drank from the river freely, but today, park visitors wade or swim in it at their peril.

Because of the river’s importance to the overall environmental health of the Big Bend region and the Chihuahuan Desert, Big Bend National Park cooperates with the U.S. Geologic Survey (USGS) and other agencies to monitor the river’s condition and the

quality of its water. Presently, park employees can measure the river’s temperature, acidity, oxygen content and salinity as often as every six hours at both Castolon and Rio Grande Village, using equipment donated recently by *The Friends of Big Bend National Park*. Staff members calibrate the equipment’s sensors and download its readings every two weeks.

Recent testing at Rio Grande Village has shown that the river’s oxygen content and specific conductivity (a measure of salinity) can change dramatically with rises and falls in the river’s level. For example, a slight rise in May 2002 correlated with a drop in dissolved oxygen that was severe enough to kill some fish in the Hot Springs area.

The park’s monitoring activities contribute to a program called the *National Stream Quality Accounting Network* (NASQAN). Sponsored by the USGS, this program eventually will provide important clues for determining the impact of upstream reservoirs on the river and the sources of pesticides and agricultural chemicals in its water. This



### Water Quality Probes at Work

During April and May, the park’s new water quality probes documented greatly fluctuating conditions at Rio Grande Village:

1. A slight rise in river level results in sharp declines in dissolved oxygen as organic debris washed into the river boosts microorganism activity. The large dip on May 6-7 killed some large fish.
2. Conductivity (a measure of salinity) also fluctuates greatly. As the river rises, it decreases as fresh rainwater enters the river. However, it then rises steeply as the river level falls, probably from salts leaching from the riverbanks. As the river level stabilizes, the salinity again falls at Rio Grande Village, probably due to the influence of the many springs along the river which dilute the salty river water.

in turn may be the first step in restoring at least some of the river’s natural vitality and ecological importance. Perhaps some day, the “big river in a stone box” will play more of its former, natural role in the story of America’s Southwest.

# Escape to Big Bend’s Canyons

Ranger Angelina Yost

Imagine drifting down the Rio Grande through sheer walls of limestone, with the occasional sound of your paddle dipping in the water and the song of a canyon wren as your only acoustic accompaniments. A river trip through one of Big Bend National Park’s spectacular canyons can offer you this type of wilderness escape. If you are having trouble deciding which of the many canyons to explore, this guide will help you make your decision.

### Spectacular Santa Elena

Santa Elena Canyon, downstream, is the most popular overnight or three day trip, not only because the put-in and take-out are easily accessed by car, but because it is often considered the most dramatically beautiful. Santa Elena has the tallest cliffs forming the canyon wall- up to 1,500 feet. The first 13 meandering miles from the put-in at Lajitas give you a good look at the contrast between the riparian and desert ecosystem. The river becomes more technical in the last seven miles when you have entered the actual canyon. Two miles into the canyon, the largest rapid, the Rock Slide is classified as a Class IV rapid at certain water levels.



T. VandenBerg

two miles upstream, which has ferns growing where water is seeping out of the rock.

### Beautiful Boquillas


For visitors with less experience, a relaxing two to four day river trip through Boquillas Canyon is a great choice. The rapids in this 33-mile journey only rate up to Class II. Camping a couple of nights by the soothing sounds of the river, and marveling at the 1,200 foot canyon walls, will allow yourself time to forget about the daily distractions of life. As you travel down the canyon, notice the candellia wax mining camps on the Mexican side.

### Magnificent Mariscal

Since you need a high clearance vehicle to reach Mariscal Canyon, it is a wonderfully remote day or overnight river trip. It is the shortest canyon in the park, 10 miles long, with varied scenery and stunning limestone cliffs rising up to 1,400 feet. A few Class II-III rapids give this excursion some excitement.

Check with a ranger about road conditions before embarking on your journey.

Quiet and solitude are rare qualities in today’s modern world, but are qualities that exemplify the majesty of Big Bend. Using a canoe or raft to escape into the Park’s magical canyons, is one of the best ways to truly experience Big Bend National Park’s wilderness. Whether you decide on a day trip or a 10-day journey, each of these canyons will carry you into an ethereal world of water, rock, and sky.



## The Big THREE

### River Canyons in Big Bend National Park

#### *Santa Elena*

Easy access. Big Bend’s most popular river trip.

Length:	20 miles
Depth:	1,500 feet
Put-in:	Lajitas
Take-out:	Near Castolon
Time to float:	1-2 days

#### *Mariscal*

The park’s most remote river canyon.

Length:	10 miles
Depth:	1,400 feet
Put-in:	Talley campsite
Take-out:	Solis campsite
Time to float:	1 day

#### *Boquillas*

Longest float trip in the park.

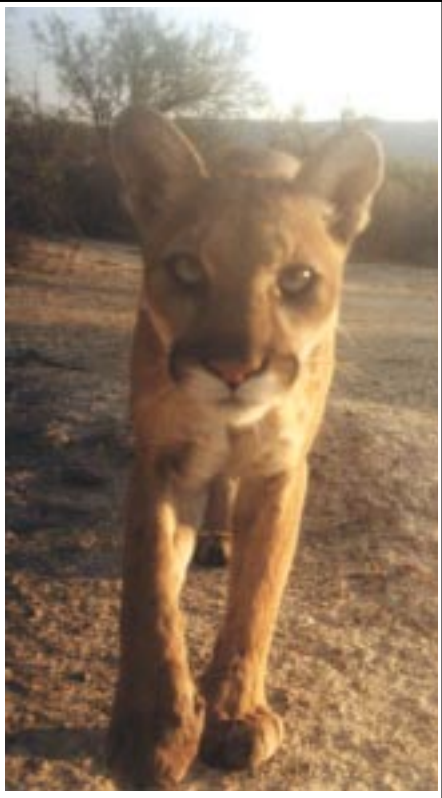
Length:	30 miles
Depth:	1,200 feet
Put-in:	Rio Grande Vill.
Take-out:	La Linda
Time to float:	3 days

# Lion Country

If Big Bend had a symbol, it might well be the mountain lion -- the embodiment of freedom and wildness. Solitary and secretive, this mighty creature is the unquestioned lord of its natural world. As one of Big Bend's top predators, *Felis concolor*—"cat all of one color"—is vital in maintaining the park's biological diversity. Within the delicate habitats of the Chihuahuan Desert, mountain lions help balance herbivores (animals that eat plants) and vegetation. Research shows that cats help keep deer and javelina within the limits of their food resources. Without lions, the complex network of life in Big Bend would certainly be changed.

Encountering a mountain lion, however, can lead to conflicts in maintaining the balance between natural processes and visitor enjoyment and safety. Since the 1950s, there have been more than 800 sightings of mountain lions by visitors. While over 90 percent of these sightings were along park roadways, encounters along trails have also occurred. Since 1984, three lion and human encounters have resulted in attacks on people. In all cases, those attacked recovered from their injuries and the aggressive lions were killed, preventing them from playing out their important natural roles. The more we know about lions, and the less we seek an encounter, the better able we will be to make life easier for them and for us.

How much do you really know about this powerful and wild cat? Mountain lions live throughout the park, including the Chisos Mountains where they prefer to use trails. Your chances of encountering an aggressive lion are remote. What can you do to minimize the consequences of an encounter? Avoid hiking alone or at dusk or dawn. Watch children closely; never let them run ahead of you.



## NEVER RUN FROM A LION!

Do not crouch down; the lion has seen you long before you saw it.

Hold your ground, wave your hands, shout! If the lion behaves aggressively, throw stones.

Convince the lion that you are not prey and that you may be dangerous yourself.

If you have small children with you, pick them up and do all you can to appear large.

Report all lion sightings to a park ranger.

The lion's role is a part of the health and welfare of the entire ecosystem. Research and further human understanding of the cat's habits pave the way for conservation efforts in its behalf. As we discover more about the lion, we fear it less and appreciate it more. For many visitors, just seeing a track, or just knowing lions are out there, will be reward enough.

# Black Bears

The return of black bears to Big Bend National Park is a success story for both the bears and the park. Native to the Chisos Mountains, bears disappeared from this area during the pre-park settlement era. After an absence of several decades, bears began returning to the park from Mexico in the early 1990s.

Today, wildlife biologists estimate that up to 12 black bears may live in the park. Though they prefer the wooded Chisos Mountains, bears also range along the Rio Grande and throughout the desert, particularly when drought dries up their regular water sources in the mountains.

Black bears are omnivorous. They eat large amounts of nuts, fruits, sotol and yucca hearts, insects, and smaller quantities of eggs, small mammals, reptiles, amphibians, honey, and carrion. Their strong sense of smell also leads them to human foods, and they can quickly open coolers, backpacks, and trash cans when enticed by food odors.

Bears normally avoid humans, but bears that learn to get food from human sources often become aggressive in their attempts to get more "people" food. When humans disobey the rules of both the park and nature by feeding bears, it is the bears that end up paying the ultimate price. Park staff may have to kill bears that lose their fear of people and en-



D. Onorato

danger humans in their attempts to get our food. Fortunately, Big Bend has not had to kill any bears, but some other national parks destroy several bears each season; we hope that through educating visitors about proper behavior in bear country, we can avoid this tragic outcome.

Big Bend has made it easy to keep edible items away from bears. Campers at the Chisos Basin Campground, at High Chisos backpacking sites, and at some primitive roadside campsites will find bearproof storage lockers for storing all edibles. Hard-sided vehicles are also suitable for storing edible items. All dumpsters in the Chisos Mountains developed areas are bearproof, as well. And remember, a bear's definition of an "edible" is far broader than ours; lock up sunscreen, skin lotion, toothpaste, soap, and other toiletries whose odors might attract wildlife.

There really are no problem bears-- only problem people. Carelessness can kill. Don't be responsible for the death of a bear. Follow the guidelines below. Pay close attention to the food storage rules posted in the Basin campground and on your backpacking permit. Your actions affect both Big Bend's wildlife and future park visitors.

With your help, bears and humans CAN live safely together in Big Bend National Park.

# Don't Call Me Pig!

For many visitors to Big Bend National Park, seeing a javelina (hav-uh-LEE-nuh) is a new experience. These curious creatures, also known as collared peccaries, are only found in the United States in Texas, New Mexico, and Arizona. They are covered with black, bristly hairs and generally weigh between 40 and 60 pounds. They usually travel in groups called bands that consist of 10-25 individuals. Peccaries have a highly developed sense of smell, but very poor vision.

Physically, javelinas resemble pigs, but in reality, they are not closely related to pigs at all and have been genetically distinct from them for millions of years. A closer look reveals several major differences between the two animals. Javelinas have 38 teeth; domestic pigs and wild boars have 44. The canine teeth of the javelina are short and straight, while those of pigs are longer and curved. Javelinas have a scent gland that they use to mark their



T. VandenBerg

territory that pigs do not have. Pigs sweat to keep themselves cool, but javelinas do not have sweat glands and must instead cool themselves in available water sources or by staying in the shade.

A javelina's diet includes prickly pear cactus, grasses, mesquite beans, pinyon pine nuts, fruits, berries, and seeds. Unfortunately however, many javelinas now include human food as part of their diet. Every year we are seeing more and more campsites in the park raided by javelina. Although normally not aggressive, they can be when food is involved. Never feed javelinas. Protect yourselves and our javelinas by properly storing all your food inside a vehicle or in the food storage lockers provided in the campgrounds. Do not leave coolers or food boxes unattended on picnic tables or in a tent. Flatten tents when you are away from your campsite. It is important that javelinas and all park animals eat their natural food sources to stay healthy and safe. With your help, these unique animals can continue to thrive and thrill park visitors for years to come.

## Keep ALL Wildlife WILD

### In the Basin Campground

- Store food, beverages, trash, toiletries, pet food, and dishes in the bearproof storage locker provided at your site.
- Keep your campsite clean. Take trash and food scraps to a dumpster.
- Dump liquids in restroom utility sinks, not on the ground.
- Ice chests and coolers are not bear-proof; store them in your vehicle.

### Cyclists

- Use food storage lockers where provided.

### At the lodge

- Leave nothing outside your room, on the balcony, or on the porch.

### When hiking

- Never leave packs or food unattended.
- Avoid carrying odorous food and toiletries.
- Leave excess food and beverages in your trunk or food storage box
- Carry out all trash, including orange peels, cigarette butts, and left-over food.





C. Greiner

Hiker on the Northeast Rim

# Hiking & Backpacking -Big Bend Style

Ranger Mary Kay Manning

There is no better way to fully experience an area than on foot, and Big Bend National Park offers over 200 miles of trails for adventurous hikers to explore. Some are well-maintained and easy to follow; others, particularly the more remote routes in the desert, are seldom maintained and are marked only by small rock cairns, if marked at all.

Since there are so many good trails to experience, hikers are encouraged to refer to *The Hikers Guide to Trails of Big Bend National Park* or *Hiking Big Bend National Park* for detailed information on each one. For a list of recommended easy and moderate hikes, refer to page 9 in this newspaper, where a chart lists all trails under five miles round-trip.

While most people express concern about potential hazards such as encountering aggressive or poisonous wildlife while hiking, environmental conditions pose a much greater threat. Mountain lion attacks and rattlesnake bites are rare, but dehydration and heat stress are common. Water is scarce throughout the park, so carry all you need. Plan on drinking at least a gallon of water per day.

## Permits

Backpackers must get free camping permits prior to beginning their trips. The park has strict rules about food storage, fires, human waste, and other camping issues, and a ranger must go over these regulations with backpackers prior to issuing the permit. There are over 40 backcountry campsites available to backpackers in the Chisos Mountains. You must select a site when getting your backcountry permit, as camping permits for the mountains are site-specific. Each visitor center has a reference book with photos and descriptions of each campsite to aid in site selection.



Backcountry Permits are required for all overnight trips.

There are no designated campsites for backpackers in the desert; backpackers must specify only which general area or zone they plan to camp in. Once out in the desert, backpackers must find an appropriate camping site that is at least one-half mile from any road, out of view from roads, and at least 100 yards from trails, water sources, and historic sites.

## Chisos Mountain Trails

When temperatures are high, most hikers head for the shady trails high in the Chisos Mountains. If late summer rains have been sufficient, numerous species of blooming wildflowers will line the mountain trails from August through October. Early November is a good time to see the leaves on the maples and quaking aspen change color. Hikers will probably want to invest a dollar in a *Chisos Mountains Trails* map; this detailed 7.5 minute map of the Chisos Mountains also has good trail descriptions on the back.



Park Visitor Centers offer a wealth of trailguides and maps

## Desert Trails

When the mercury falls, head out into the desert. There are generally fewer hikers on these trails, offering a greater chance for solitude. Correspondingly, many desert trails are not as well-maintained or well-marked as those in the Chisos Mountains, and the chance of getting lost on some desert routes is greater. If you plan to hike in the desert, refer to one of the hikers' guides mentioned above and discuss your plans with a park ranger. Depending on the route, you may also need to purchase a 7.5 minute topographic map of the area *and know how to use it!* Park rangers have had to conduct extensive (and expensive) searches for hikers and backpackers who either didn't have maps or had maps but didn't know how to read them.

Big Bend National Park is a hiker's paradise. Plan ahead, be prepared, and have a great hike!

## "Twinkle, Twinkle, Little Star..."



Lack of light pollution makes Big Bend National Park an excellent place for stargazing most nights of the year. Look up on a clear, dark night for these celestial figures and events:

**Venus** shines brightly in the western sky just after sunset through September. It disappears in October, then reappears as the "morning star" in early November.

Look for **Jupiter** and **Saturn** in the pre-dawn hours throughout the fall.

The **Orionid Meteor Shower** will peak after midnight on October 20, but the moon will interfere.

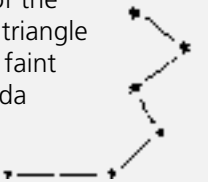
The **Leonid Meteor Shower** will peak after midnight on November 17, but the bright moon may interfere somewhat.

The **Milky Way Galaxy** appears as a cloud-like band that stretches across the sky from the northeast horizon to the southwest.

The constellation **Scorpio** dominates the southern sky through late summer; it sinks below the horizon as fall progresses. This is one of the few constellations that resembles its namesake.



**Cassiopeia** forms a prominent W-shape in the northeast part of the Milky Way. The upper triangle in the W points at the faint cloud of the Andromeda Galaxy, 2.2 million light-years away.



The **Big Dipper** sits low in the northwest sky through mid-fall. Not a true constellation by itself, it is part of the large constellation Ursa Major, the Great Bear. Just as the bears here on earth go into their dens for winter, the Great Bear appears to sink below the horizon as winter approaches.



## Surf Big Bend

Official NPS Website



Live Web-cam  
Daily Weather  
River Levels  
Campgrounds  
Research

Backcountry  
Park Maps  
Press Releases  
Road Conditions  
Ranger Programs  
What's Blooming?  
Bird Sightings  
Photo Gallery

...and more!


www.nps.gov/bibe



Seeing The Park


Now That You're Here,  
What Can You Do?

You've driven many miles to get here, and have finally arrived at your destination: Big Bend National Park. But now what? Now that you're here, how do you spend your time? Where should you go? What should you explore? The park is big, and often visitors have a limited amount of time to explore.



S. Harmon

One Day




K. Beckwith

If time allows, drive to the **Chisos Mountains** to take in the spectacular mountain views. Walk the 0.3-mile self-guiding Window View Trail to get a feel for the mountain scenery.

A trip along the **Ross Maxwell Scenic Drive** will give you a taste of the Chihuahuan Desert and will lead you to the Rio Grande. There are scenic overlooks and exhibits along the way. Sotol Vista, Mule Ears Overlook and Tuff Canyon are all worthwhile stops. The short walks to the Sam Nail (Old) Ranch and Homer Wilson (Blue Creek) Ranch and a visit to the Castolon Historic District will give you a glimpse into Big Bend's past.

A highlight is the short (*1.6-mile round trip*) walk into **Santa Elena Canyon**—one of Big Bend's most scenic spots. Drive to the end of the Ross Maxwell Scenic Drive to access the trailhead. You may return to the main road by returning on the Ross Maxwell Drive or on the **Maverick Road**, a 13-mile gravel road linking the Ross Maxwell Drive to the Maverick (west) Entrance. Always check on road conditions first.

Three Days




J. Bishop

With three days to spend in the park, you can explore the major roads more thoroughly and still have time for hiking. In the Basin area, consider hiking the **Window Trail** (5 miles round trip) or the **Lost Mine Trail** (4.8 miles round trip); consult the *Hiker's Guide to Trails of Big Bend National Park*, for sale in park visitor centers, for trail descriptions.

In addition to the Basin and Ross Maxwell Scenic Drive (see suggestions for “one day”) you can drive to **Rio Grande Village**, perhaps stopping at Dugout Wells along the way to walk the short Chihuahuan Desert Nature Trail. The Rio Grande Village Visitor Center offers a brief introductory slide program. Walk the **Rio Grande Village Nature Trail** which begins near site #18 in the campground. The bluff overlooking the Rio Grande at the end of the nature trail is a particularly beautiful spot at sunset.

Boquillas Canyon road will take you to several overlooks of the Rio Grande and the small village of Boquillas, Mexico. At the end of the road is the **Boquillas Canyon Trail**, which takes you to the entrance of this spectacular canyon.

One Week




K. Hockin

With a week or more to spend in Big Bend, endless possibilities are open to you. You'll have plenty of time to explore the roads mentioned in the previous sections, and will also have time to hike or to drive some of the “**unimproved**” **dirt roads**. For these, you'll need a high clearance or four-wheel drive vehicle; don't forget to check at visitor centers for current road conditions. The River Road, Glenn Springs Road and Old Ore Road are some of the more popular backcountry routes. A visit to Ernst Tinaja near the south end of the Old Ore Road is a Big Bend highlight.

If you don't have high clearance or four-wheel drive, gravel roads such as Dagger Flat, Grapevine Hills and Maverick will get you “off the beaten path.” Hike the Chimneys Trail, Mule Ears Trail, or Grapevine Hills Trail for a closer look at the desert environment. If you'd like to explore the Chisos Mountains, trails to Boot Canyon, Emory Peak and the South Rim offer good views of the park and take you into another world which seems far removed from the desert. There are plenty of opportunities for overnight backpacking along these trails. A free backcountry use permit is required and can be obtained at park visitor centers.

Float The Rio Grande



T. VandenBerg

If you have the time and a spirit of adventure, you may want to consider a river trip. Seeing the park's canyons from the middle of the Rio Grande is both fascinating and gratifying. There are many possibilities, from half-day floats to extended seven-day excursions. Park Rangers can recommend a trip that meets your abilities and interests. Rafting and equipment rental companies are listed on page 14.

See “Floating the Canyons” on page 5 and "Backcountry Planning" on page 13 for additional information on Big Bend river trips.


Enjoying Your Visit

No matter how limited your time in Big Bend, remember that you will enjoy the park more if you **stop your car and explore on foot**. That doesn't mean that you have to hike miles on steep grades; there are many short, easy walks and roadside exhibits where you can stretch your legs and enjoy the sights, smells and sounds of the Chihuahuan Desert.

Hiker's guides and road guides are available at book sales areas throughout the park, and they

offer more detailed information about Big Bend's trails and roads. Attending **ranger-led activities** and evening programs are also good ways to learn more about Big Bend; check at the visitor centers and park bulletin boards for current activities.


Remember, you will NOT be able to see everything on this trip. You will probably enjoy the park more if you choose a few spots and explore them thoroughly to get a taste of what Big Bend has to offer. Then, come back again sometime to see the rest!



8 The Big Bend Paisano



Big Bend Trails



From the 7,825 foot summit of Emory Peak, to the banks of the meandering Rio Grande, visitors will find over 200 miles of hiking trails in Big Bend National Park. Trails range from strenuous primitive routes through rugged desert backcountry to short handicapped- accessible pathways.

Below are descriptions of many of the most popular easy and moderate hiking trails. Most of these trails are perfect for shorter day hikes of up to several hours. For information on longer, more difficult routes, or to plan an extended backpacking trip, stop by any park visitor center. A large selection of maps and trail guides are available and park rangers can assist you in trip preparations and backcountry permits.




## Panther Junction - Rio Grande Village Area

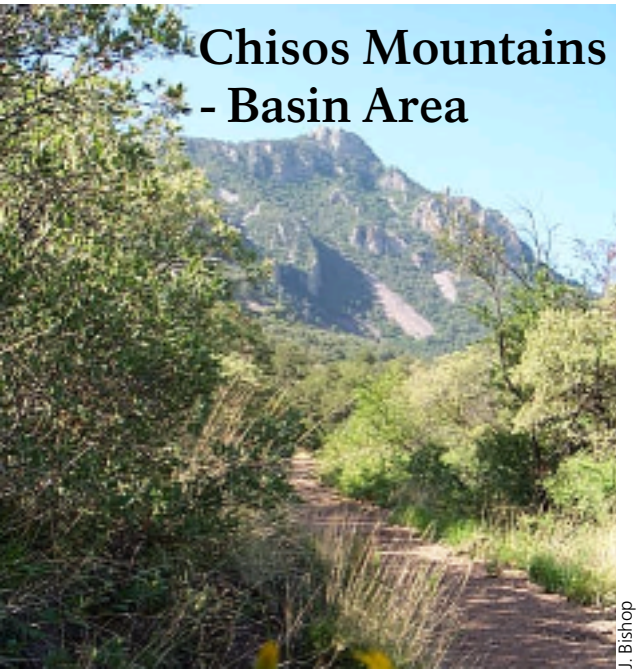
Between Panther Junction and Rio Grande Village lies a vast sweep of scrub desert, rocky ridges, and river floodplain. Sprinkled through this massive area are trails that

highlight the fascinating natural and human history of Big Bend. Discover Indian mortar holes in Boquillas Canyon and the early pioneer settlements of Dugout Wells and Hot Springs. Enjoy the diverse birdlife along the Rio Grande and the rich geology at Grapevine Hills.

One of the more popular areas in Big Bend's east

side, is the **Hot Springs Historic District**. Drift back in time and imagine what life was like during the early 1900s when J.O. Langford developed this natural hot spring into a tiny health resort. A one-mile loop takes you past the old motel, post office, homestead, and foundation of the hot spring bathhouse.

Trail	Roundtrip Length	Comments	Trailhead Location
Grapevine Hills	2.2 miles	Follows a sandy wash through boulder field. A short climb at the end takes you to a large balanced rock archway	Grapevine Hills Road mile 6
 Chihuahuan Desert Nature Trail	0.5 miles	A flat desert path near a cottonwood oasis. Signs interpret Chihuahuan Desert plant life.	Dugout Wells Picnic Area
 Hot Springs	0.75 miles	Walk past historic buildings to the riverside hot springs. 105°F water. <i>Take a bathing suit and soak a while.</i>	End of Hot Springs Road ( <i>unpaved</i> )
 Rio Grande Village Nature Trail	0.75 miles	Cross a boardwalk and climb 125 feet to a great panoramic view of the river floodplain and distant mountains. Good birding and sunrise/sunset views.	Rio Grande Village Campground ( <i>site 18</i> )
Boquillas Canyon	1.4 miles	Begins with a short climb, then descends via a sandy path to the river. Ends near a huge sand "slide."	End of Boquillas Canyon Road





The Chisos Mountains form the rugged heart of Big Bend National Park. High ridges and summits coax moisture from passing clouds. The result is a forested mountain "island" surrounded by a desert sea.

When the lower desert trails become uncomfortably hot, enjoy the shady, pine-scented trails of the Chisos Mountains. All Chisos trails begin from the Basin area

which is located in the center of the park.

For a good introduction to the scenery and wildlife of the Chisos, hike the **Window Trail**. From the Basin Campground, this trail winds two miles through colorful Oak Creek Canyon to the top of the Window pouroff. Wildlife is abundant along this trail. Look and listen for javelina, white-tailed deer, and Mexican jays.


Trail	Roundtrip Length	Comments	Trailhead Location
 Window View	0.3 mile	Level, paved, handicapped accessible. Great sunsets and mountain views.	Chisos Basin Trailhead ( <i>near the Basin Store</i> )
Basin Loop	1.6 miles	Connects the Laguna Meadow and Pinnacles Trails. Climbs 350 feet through pine/oak woodland. Nice views of the Basin area.	Chisos Basin Trailhead ( <i>near the Basin Store</i> )
The Window	5.6 miles	Descends to the top of the Window pouroff. Great scenery and wildlife viewing. Climbs 800 feet on return.	Chisos Basin Trailhead or Basin Campground
 Lost Mine	4.8 miles	This magnificent hike climbs 1,100 feet to excellent mountain and desert views.	Basin Road mile 5 ( <i>at Panther Pass</i> )

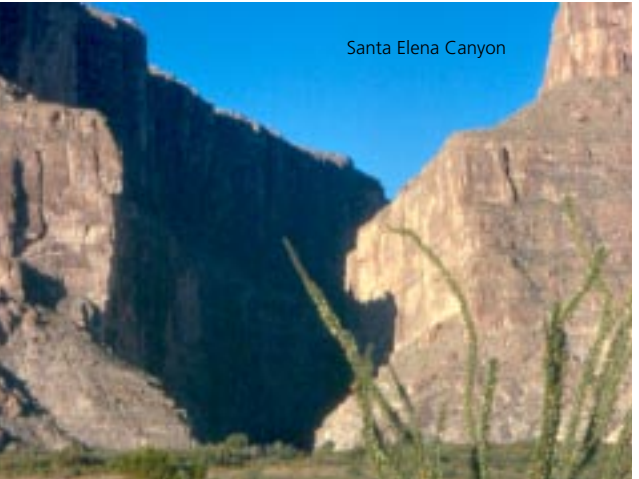
## Ross Maxwell Scenic Drive

The Ross Maxwell Scenic Drive skirts the rocky ramparts of the Chisos Mountains and descends through the spectacular west side of Big Bend National Park. Many of the park's best views and desert hikes are found here.

The Ross Maxwell Drive ends at the trailhead to **Santa Elena Canyon**. There is no better trail to experience the sights and sounds of the Rio Grande. From the parking area, the giant chasm is in full view before you. Hike to the

river's edge and follow it upstream into a world of superlative cliffs and dense thickets of riverside vegetation. Enjoy the sounds of moving water and the descending song of the canyon wren.

Trail	Roundtrip Length	Comments	Trailhead Location
Burro Mesa Pouroff	1.0 mile	A flat, sandy trail up a canyon to the base of a dry pouroff. Interesting geology and desert plants.	Ross Maxwell Dr. mile 11
The Chimneys	4.8 miles	Flat desert trail to prominent rock formations. Look for rock art. No shade.	Ross Maxwell Dr. mile 13
Mule Ears Spring	3.8 miles	A beautiful desert hike to a small spring. Spectacular geology and mountain/desert views.	Ross Maxwell Dr. mile 15
Tuff Canyon	0.75 miles	Balconies overlook this scenic canyon. A short trail leads into and through the narrow gorge carved out of soft volcanic tuff.	Ross Maxwell Dr. mile 20
 Santa Elena Canyon	1.6 miles	Crosses creekbed, climbs stairs, then follows the river upstream into the mouth of a magnificent 1,500 foot deep limestone canyon.	8 miles west of Castolon





Ranger Tom VandenBerg

One of the most outstanding aspects of Big Bend National Park is the extensive system of unpaved roads. While most visitors will stay on the 112 miles of paved routes, those with a sense of adventure and a high-clearance and/or four-wheel drive vehicle can enjoy over 150 miles of unpaved roads. These unpaved roads offer beautiful scenery, primitive campsites, access to fascinating natural and historic sites (see below), as well as the opportunity to test the durability and limits of your vehicle and its occupants.

Forty five miles of the unpaved roads are classified as “improved dirt roads.” These roads, like the Maverick Road on the park’s west side, are passable by most vehicles during much of the year. The fact that a road is “passable” does not mean that it would be ideal for today’s low-clearance passenger cars. Almost any amount of rainfall will produce a rough washboard surface on these roads. If you are not willing to submit your vehicle to this kind of punishment, you are better off avoiding all the unpaved roads in the park.

The remaining unpaved roads are classified as “backcountry dirt roads” and are considerably more primitive. Most of the year these roads, like the River Road and Old Ore Road are passable only by high-clearance and/or four-wheel drive vehicles. Some of these roads, like the Black Gap Road, are not maintained and will require determination and considerable skill in order to successfully negotiate them. Even the toughest vehicle will face a number of challenges: boulders and washes, rough washboard, sandy areas that quickly become mud after rainfall, and an abundance of thorns and spines to threaten your tires. Because many of these roads are infrequently used and patrolled, you must be prepared to deal with any challenges or emergencies that arise.

Before you leave the pavement, ensure that your vehicle and tires are in good condition. A disabled vehicle on one of these roads can become a life-threatening situation. Check all vehicle fluid levels and tire pressure.

10 The Big Bend Paisano

yourself and your passengers. Carry plenty of water, food, a first aid kit, and some sleeping gear in case you have to spend an unplanned night in your vehicle. Dress as if you were going hiking, so that you are prepared to walk if the need arises. Always check road conditions with a park ranger before you go.

While driving Big Bend’s backcountry, you are on your own—it is always best to play it safe. Drive slowly and carefully. This is a poor place to break down. If you encounter a road obstacle or conditions beyond the limits of your vehicle, turn around. If your vehicle becomes disabled, it is almost always best to stay with your vehicle. If walking becomes necessary, it is imperative that you carry water and stay on the road. Make sure to leave a note on the dashboard that describes

the problem and indicates where you are going.



In addition to protecting yourself, please help us protect your park. Stay on established roadways. Off-road driving is prohibited. Collecting rocks, plants, animals, artifacts, or any other park resources is illegal. If you plan to camp out in the backcountry, obtain a free backcountry use permit from any park visitor center.

Big Bend’s primitive road system is unique among our national parks, most of which do not allow any off-pavement driving. For those park visitors who come well prepared, Big Bend’s backcountry roads provide another aspect of the allure of this remote and primitive national park. Drive slowly, carefully, and have fun!

## A Window Through Time Backcountry Historical Sites

Ranger Gail Fox

Big Bend National Park contains one of the best-preserved examples of the Chihuahuan Desert in the United States. Despite high temperatures and little rainfall, plants and animals thrive and provide visitors with unique observational opportunities. Given the richness of the region’s natural history, it’s easy to overlook the

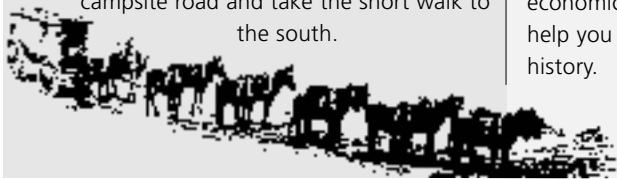


Mariscal Mine

The following is a listing of some of the historic sites on different backcountry roads. Always check with a ranger for current road conditions before heading out. Road guides are sold at all visitor centers and can enhance your park experience.

### Old Ore Road

About five miles north on the Old Ore Road is the **La Noria** backcountry campsite. La Noria was a farming community established around 1900 by Max A. Ernst. Spanish for well, La Noria refers to the spectacular tinaja (now called Ernst Tinaja) located nearby. The town of La Noria was an important area for local residents, with a store, post office, and school located there. After the Mexican Revolution began in 1910, the U.S. Army established a camp at La Noria to patrol the border and provide protection from bandit raids. Not much remains at the La Noria site today, but building foundations and other evidence can be seen by the careful observer. To visit the old La Noria site, drive to the end of the campsite road and take the short walk to the south.



### River Road

With almost thirty structures still standing, the **Mariscal Mine** on the River Road East is one of the largest and most interesting historic sites in the park. Mariscal was a mercury mine that operated from 1900 to 1943. The mercury was processed on-site, utilizing a wood-powered furnace to heat the red colored cinnabar ore. At high temperatures, the mercury in the ore vaporized and was moved through condensers where it cooled and became a liquid. The liquid mercury was then collected into large flasks and was ready for sale. Working at the mine was difficult, dangerous work. The days were long and many miners experienced mercury poisoning. The Mariscal Mine was a large-scale economic operation and a visit there today will help you experience Big Bend’s rich human history.

A free brochure is available at Panther Junction.

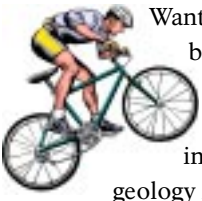
### Glenn Spring Road

The **Glenn Springs** historic site located along the Glenn Spring road was the scene of a bandit raid during the Mexican Revolution. The whole border region was unstable during this time and the threat of violence was realized at Glenn Springs on the night of May 5, 1916. Raiders from Mexico crossed the Rio Grande River under cover of darkness and began attacking the remote community. The small Cavalry force stationed there was outnumbered and unable to stop the bandits. By the time the raid ended, four people were dead, including a nine-year old boy and several others were seriously injured. The store was looted, and much of the candellilla wax factory that was the town’s mainstay was destroyed. After the raid, a large cavalry camp was established, but the town never recovered. Today you can still see the cemetery, remnants of the wax camp, and the spring.

A free brochure is available at Panther Junction.



## Big Bend by Bike



Want to experience the Big Bend country more intimately than you can by car, but aren't interested in hiking? Over 100 miles of paved roads and 160 miles of dirt roads lure visitors to explore Big Bend National Park by bicycle. The rugged terrain provides a challenge for most cyclists, but the incredible scenery and the chance to observe the park's flora, fauna, and geology more closely make the effort worthwhile.

All park roads are open to bicycles. However, they are not allowed on any trails or other off-road areas. Additionally, park roads do not have shoulders and cyclists must share the roads

### Old Ore Road

**26 miles one-way; strenuous.  
4-6 hours**

This ride is best done from north to south for an easier ride. Park your vehicle along the wide shoulder at the start of the Dagger Flat Road and ride 2 miles to the junction where the Old Ore Road begins. The Old Ore Road is rough and rocky, and there are places where you must work your way over small ledges and pick your route between large boulders.

For a shorter ride on this road, begin at the south end of the Old Ore Road and ride 5 miles north to the side road leading to Ernst Tinaja campsite #1. Leave your bike in the parking area at the end of this road and hike one-half mile up the creekbed to Ernst Tinaja, one of the most geologically interesting spots in the park. You can continue your ride along the road another few miles north to reach Carlotta Tinaja; leave your bike near the road and explore this short canyon by foot. Look for fossils in the limestone around the tinajas.

### Glenn Springs - Pine Canyon Road

**6.4 miles one-way; very strenuous.  
About 3 hours round-trip.**

This is one of the most strenuous rides in the park. Park along the road shoulder at the north end of the Glenn Springs Road. After 2.3 miles, turn right onto the Pine Canyon Road. The road ends at the trailhead for the Pine Canyon Trail; leave your bike here and hike 2 miles up the trail into the canyon.

### Dagger Flat Road

**7 miles one-way; easy.  
2-3 hours round-trip.**

Park along the wide shoulder at the beginning of the Dagger Flat Road. This road has small dips and sandy areas and slowly gains elevation toward the end. Use the guide book available at the start of the road to learn about the plants along the way.

with motorists who may not be aware of them or how to safely pass them. For their own safety, cyclists are discouraged from riding on the Basin Road, as the numerous hills and curves limit motorists' sight distance.

Cyclists should refer to *The Road Guide to Backcountry Dirt Roads of BBNP* and *The Road Guide to Paved and Improved Dirt Roads of BBNP* for good descriptions of the roads and points of interest. While there are many good roads to ride in the park, few of them are loop trips. Having someone shuttle you or your vehicle broadens your opportunities.

### Paint Gap Road

**2.5 miles one-way; easy to moderate.  
1.5-2 hours round-trip.**

Park at the junction of the paved road and the Paint Gap Road. The first part of this road is easy, but the last part is extremely rocky and rough.



### Panther Junction to Castolon

**35 miles one-way; moderate to strenuous.  
3-6 hours.**

This is one of the most scenic rides in the park. As the road skirts the Chisos Mountains, it provides incredible views of the mountains, the desert, and striking geologic features. The overall elevation loss is 1580 feet, but there are several steep hills along the way.

### Panther Junction to Rio Grande Village

**20 miles one-way; mostly easy.  
1.5 hours one-way.**

Although there are some hills, this ride is mostly downhill, dropping 1900 feet over 20 miles. For a side trip, ride the 2-mile improved dirt road to the Hot Springs Historical Area and explore the buildings and short trail by foot.

## What Can Kids Do Here?

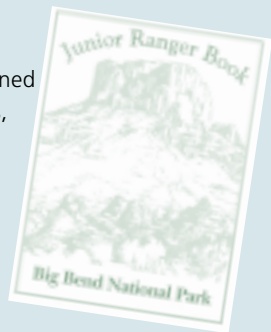


### Become a Junior Ranger!

Learn desert secrets, Identify the parts of a cactus, and discover what javelina eat!

The Big Bend Junior Ranger program is designed for kids of all ages. Through activities, games, and puzzles, kids can have fun as they learn about the park. They can also earn stickers, badges, patches, and certificates.

The Junior Ranger Activity Book costs \$1.00 and is available at all park visitor centers.



### Hike a Trail!

Many park trails are suitable for families. Consult the "Easy and Moderate Hikes" chart on page 9. For children in strollers, consider the Window View Trail, a paved ¼-mile loop trail that begins at the Chisos Basin trailhead.

Big Bend is a special place! We hope you enjoy Big Bend National Park and that you learn to value its resources. If you have any questions, ask a park ranger for help.

## Where's All The Wildlife?

Ranger Dan Leavitt

"Hey Ranger, we've been driving all day and haven't seen any animals. What animals live here?" These questions may have crossed your mind too. You may be surprised to learn that over 3,000 different kinds of animals inhabit Big Bend National Park. While the vast majority of these are invertebrates (animals without backbones), over 600 species of vertebrates are also known here.

Common invertebrates include tarantulas, wolf spiders, centipedes, millipedes, scorpions, sunspiders, grasshoppers, walking sticks, velvet ants, harvester ants, and mites. Many are active only after summer rains, while others like the grasshoppers and cicadas may be heard singing throughout the heat of the day.

Vertebrates are most popular with park visitors since they include furry friends like deer, javelina, black bears, and America's favorite watchable wildlife - *the birds*. Checklists of the park's birds, mammals, reptiles, and invertebrates are available at park visitor centers. Researchers have identified over 39 species of fish, 75 species of mammals, 11 amphibians, and 56 reptiles. Big Bend's bird checklist contains 450 species, the largest diversity of birds to be found in any U.S. national park.

Looking out over the desert landscape, it may seem completely uninhabited, but the desert is full of surprises. Those who take the time to get out of their car and investigate, will discover abundant evidence of the desert's denizens. Holes, tracks, nests, and droppings are everywhere. Lizards dart by at amazing speed. Listen for the tinkling notes of the black throated sparrow, or the raspy song of the cactus wren.



Desert wildlife is elusive.

S. Hench

Wildlife enthusiasts must keep in mind that in desert areas like Big Bend, low rainfall and high temperatures force many creatures to live extremely cautious lifestyles.

Many leave their burrows only under cover of night. Others are active only during the cooler hours of early morning. Follow their example and start your day early, check near springs and along the Rio Grande, take a siesta during the heat of the day, and adjust your schedule to that of the wildlife you want to see. If you do so, your wildlife viewing rewards will be many.

### "Desert Tracks"

Desert dramas are revealed in sand and soft soil. To see an animal, both you and it must be in the same place at the same time; but tracks may last for days. Below are some commonly seen Big Bend tracks.

Roadrunner



Coyote



Javelina



Lizard



## Ranger Programs



Join a park ranger for a guided hike, evening slide show, talk, or workshop on Big Bend's natural and cultural history. These free programs are offered daily. Consult the Interpretive Activities Schedule posted on visitor center and campground bulletin boards for more information.

## Camping



### Tent Camping

Camping in Big Bend National Park is on a first-come, first-served basis with **no advance reservations taken**. The National Park Service operates campgrounds at Rio Grande Village, the Chisos Basin, and Castolon. The cost is \$8.00 per night for a site.

Camping is also available at **primitive backcountry campsites** in the Chisos Mountains and along backcountry roads. High-clearance or 4-wheel drive vehicles are necessary to reach most road sites. Backcountry permits are required and can be obtained in person at park visitor centers up to 24 hours in advance.

Groups of 10 or more are eligible to reserve a spot in one of the park's **group campsites**. Reservations may be arranged up to 90 days in advance by calling (915) 477-2251.

Camping areas are often full during the Thanksgiving and Christmas holidays, as well as during spring break in March or April.



The only showers and laundry facilities in the park are located at the Rio Grande Village store.



Basin Campsite

## Lodging



The Chisos Mountains Lodge, operated by Forever Resorts Inc., is located in the Chisos Basin at 5,400 feet elevation. The lodge offers a variety of rooms and cottages, plus a gift shop and dining room. For reservations, please call (915) 477-2291 or 2292.



### Trailers & RV's

All park campgrounds can accommodate trailers and RVs, but vehicle lengths have a great deal to do with safely reaching the campground and finding a suitable space.

The only hookups available in Big Bend National Park are at Rio Grande Village in the 25-site, **Rio Grande Village RV Park** operated by Big Bend Resorts, Inc. Although there is no size restriction, your vehicle must be equipped with water and electrical hookups as well as a three-inch sewer connection. Register at the store. No advance reservations are taken.



Rio Grande Village Campground

Near the RV park is the 100-site **Rio Grande Village Campground** operated by the National Park Service. Although there are no hookups, water, flush toilets, and a dump station are available. Set in a large grove of cottonwoods, the campground is adjacent to the Rio Grande. Many of the sites are pull-throughs. **Generator use is limited: from 8:00 am to 8:00 pm daily**. A no-generator use area is also designated.

The 65-site **Chisos Basin Campground** is rugged and hilly. The sites are small and most are not suited to recreational vehicles or trailers. The road to the Basin is steep and curvy, especially at Panther Pass—the road's highest point. The road into the campground is a 15 percent grade. Trailers longer than 20 feet and RVs longer than 24 feet are not recommended.

**Cottonwood Campground**, near Castolon, offers pit toilets and potable water, but no hookups or dump station. **Cottonwood is a NO-generator campground**.

Big Bend's unpaved roads are generally unsuitable for RV's and trailers. Overnight camping in any primitive site requires a backcountry permit, obtained in person at park visitor centers up to 24 hours in advance.

## Banking



There are **NO** banking facilities in Big Bend National Park. The nearest banking/ATM services are located in Study Butte, 26 miles west of park headquarters. Most stores accept major credit cards; however, camping fees must be paid in cash. It is advisable to have small bills (\$1, \$5, \$10, \$20) since larger bills are often difficult to change.

## Birdwatching



While it is true that the incredible diversity of the spring migration will not be equaled during the late summer and fall, the months from August through November in Big Bend National Park still have much to offer to the birder. Consider that many “specialty” species wander away from their normal nesting range after breeding. This phenomenon, called post-breeding dispersal, may produce rarities including broad-billed hummingbirds, sulphur-bellied flycatchers, and red-faced warblers. If the possibility of rarities like these doesn't excite you, keep in mind that on the heels of the post-breeding dispersal comes the beginning of the fall migration.

Moving at a more leisurely pace and lasting longer, generally from mid-August to early December, the fall migration is not as spectacular as that of the spring, but the potential still exists for surprises. It can be the season of the second chance. Eastern vagrant warblers missed in the spring sometimes show up again in the fall. Black-throated blue warblers, occurring rarely in the spring and accidentally in the fall, are known to come through the Big Bend anytime from late August into December. The challenge of this season is identifying birds in faded adult or confusing juvenile plumage.

Patience, a good field guide, and knowledge of where to look are the keys to locating the birds of Big Bend. A checklist of birds is available for purchase at any visitor center and is a great aid in determining which species are likely and the habitats where they are found. A visit to all the key habitats will provide the best opportunities to see birds and to build a “Big Bend List.”

While “listing” is a legitimate and fun activity, keep in mind that many of the species that are the source of your enjoyment are members of populations in decline. Habitat destruction and degradation on both the wintering and breeding grounds are bringing many of these birds to the brink. You can help in several ways: tread softly in fragile habitat areas, taking care not to damage water sources. Don't disturb birds with excessive noise or intrusive attempts at photography. Please share your observations with us, particularly of rare and accidental species. Your detailed reports become part of the record and can be an aid to researchers. Enjoy the birds of fall, and do all that you can to ensure their return.



### Keep Big Bend Beautiful!

For your convenience, barrels for recycling cans, glass, and plastic bottles are located at the entrances of park campgrounds.

## Park Campgrounds

	Elevation	Sites	Nightly Fees:	Facilities	Registration	Comments
Chisos Basin	5,401 ft	65	\$8.00*	Flush Toilets, Dump Station	Self-pay station	Surrounded by rocky cliffs. Many hiking trails nearby.
Cottonwood	2,169 ft	35	\$8.00*	Pit Toilets, No Generators	Self-pay station	In a cottonwood grove along the river. Grassy sites. Good birding.
Rio Grande Village	1,850 ft	100	\$8.00*	Flush Toilets, Dump Station	Self-pay station	Largest campground. Shady sites. Laundromat and showers nearby.
Rio Grande Village RV	1,850 ft	25	\$14.50	Full Hookups	Inquire at RGV Camper's Store	Concession-operated. Adjacent to RGV store.



## Horses

Visitors are welcome to bring and use their horses in the park. A free stock-use permit is required and may be obtained in person at any of the park's visitor centers up to 24 hours in advance of the trip.



While horses are not permitted on paved roads or road shoulders, all gravel roads are open to horses. Cross-country travel is permitted in the park, except in the Chisos Mountains where horse use is limited to the Laguna Meadow, Southwest Rim, and Blue Creek trails.

Horses are not permitted on nature trails, the Santa Elena and Boquillas Canyon Trails, or the Pine Canyon Trail, nor are they permitted in picnic areas.

Grazing within the park is not permitted, so you must bring your own feed. Stock may be watered in the Rio Grande and at springs that are not used for domestic water supply. Be prepared to haul water for your stock as springs are unreliable, especially during winter months. Check current spring conditions at a visitor center when you arrive. All horse manure must be removed from the park, or deposited at a designated location near the NPS horse corral at Panther Junction (ask a ranger for directions).

You may camp with your horses at many of the park's primitive road campsites. These are available on a first-come, first-served basis through a free backcountry use permit available at park visitor centers. These campsites are especially difficult to obtain during holiday periods, especially spring break.

Camping with horses is not permitted in any of the park's developed campgrounds. Government Springs campsite, located 3½ miles from Panther Junction, is a primitive campsite with a corral large enough for 4-8 horses. If you plan to bring horses to the park, you may reserve this campsite up to 10 weeks in advance by calling (915) 477-1158.

## Hiking & Backpacking

Big Bend National Park offers over 100 miles of hiking trails. A free permit is required for all overnight trips, and can be obtained in person only up to 24 hours in advance of the trip. Because of the unreliability of desert springs, it is difficult to plan an extended backpacking trip prior to your arrival in the park. Decide how much distance you want to cover and how much time you have. Park staff can assist you with trip planning based on your needs and current trail conditions. The Panther Junction Visitor Center is open daily from 8:00 a.m. to 6:00 p.m.

Backpacking sites in the Chisos Mountains are difficult to obtain during the Thanksgiving and Christmas holidays, and during spring break in March and early April.

You may purchase maps and hiker's guides at park visitor centers, or you may order them in advance from the Big Bend Natural History Association by calling (915) 477-2236.



**Pets are not allowed on trails or in backcountry areas.** *Please leave pets at home if you plan to hike.*

The Southeast Rim of the Chisos Mountains, Mariscal Rim, and Casa Grande are closed during the peregrine falcon nesting season (February 1 - July 15).

## Weather

Elevational differences in Big Bend mean that temperatures can be vastly different in different areas of the park. The lower areas along the Rio Grande are very hot during the summer months, while the Chisos Mountains are considerably cooler. Winter weather generally occurs between November and February, with temperatures dropping dramatically as cold fronts move through the area. Between June and October thunderstorms and flash floods may occur. Bring clothing for both warm and cool weather, as well as rain gear, when visiting Big Bend any time of the year.

*See "how hot?" on page 15.*

## Floating the Rio Grande

The Rio Grande follows the southern boundary of Big Bend National Park for 118 miles. In this distance it has carved three major canyons, Santa Elena, Mariscal, and Boquillas, which have rapids varying in difficulty from Class I to Class IV. Between the canyons, the river is generally slower-paced. The Rio Grande Wild and Scenic River extends downstream beyond the park boundary for an additional 127 miles.

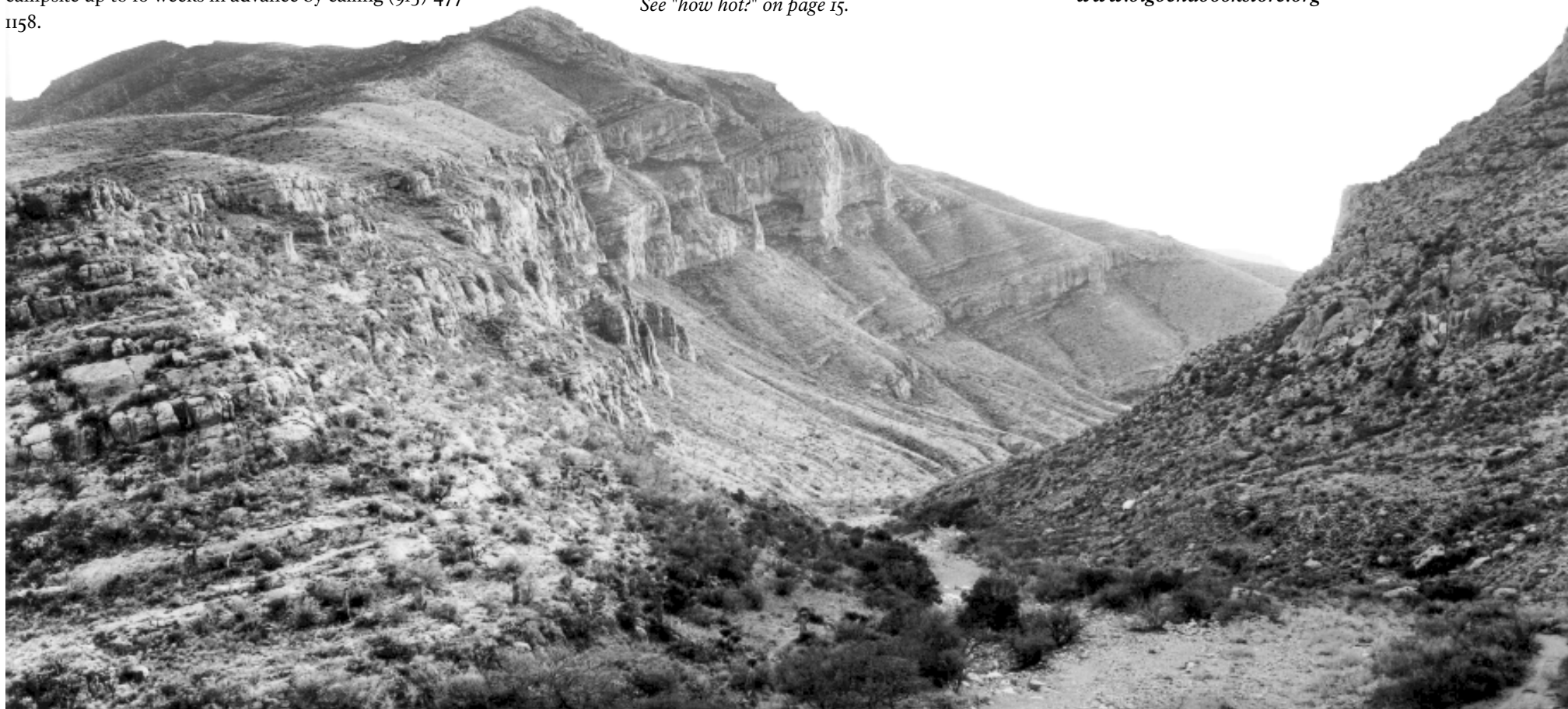
If you plan to take a river trip in Big Bend National Park, you may bring your own equipment, or you can hire a guide service. Four local companies (see page 14 for telephone listings) provide guide service in the park—you may reserve a trip by contacting them directly.

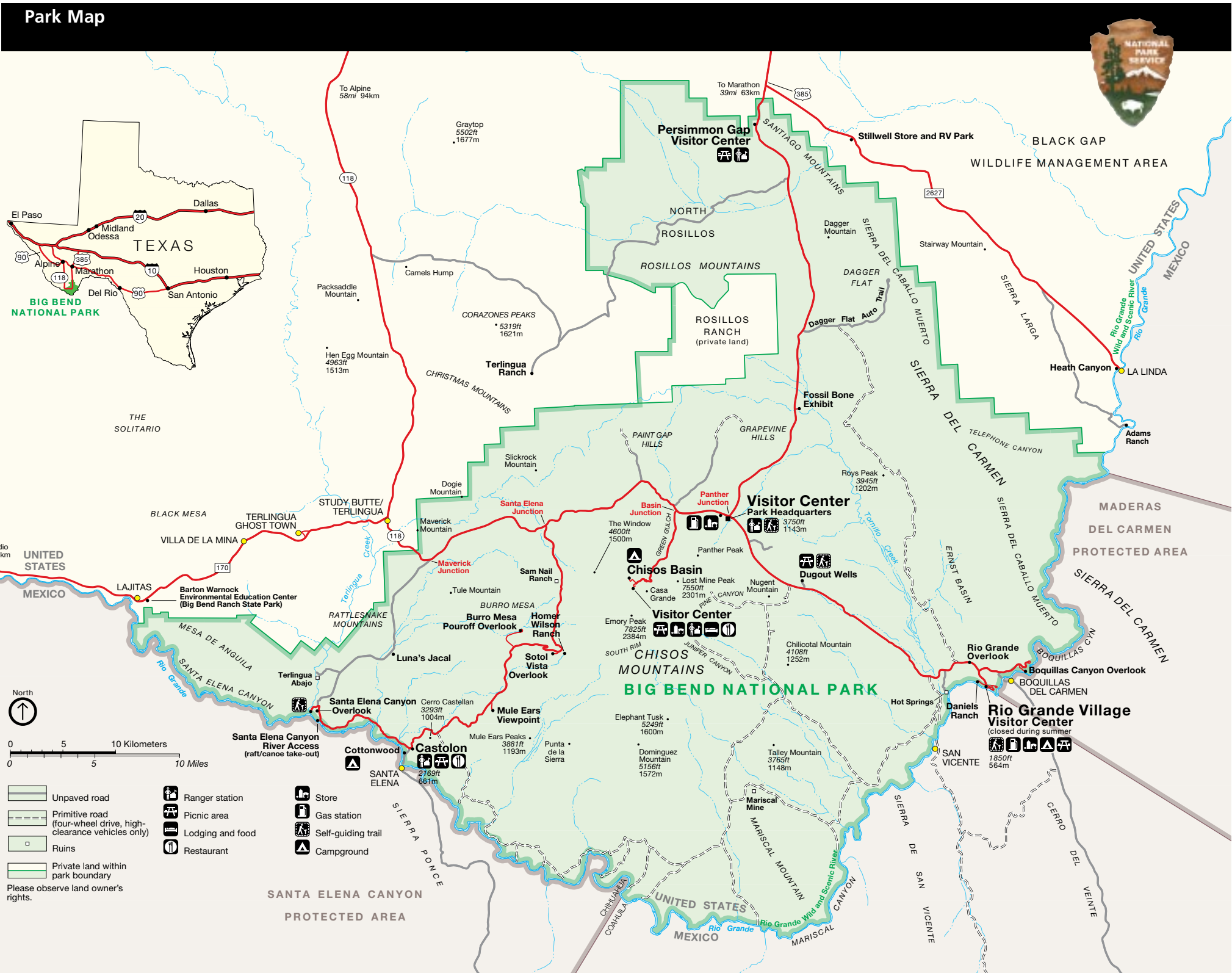


If you plan to use your own equipment, you must obtain a free permit at a park visitor center. Permits are issued up to 24 hours in advance of your trip, in person only. Stop by the Panther Junction Visitor Center for your permit and for current river condition information prior to your trip.

Permits for the Lower Canyons of the Rio Grande Wild and Scenic River may be obtained at the Persimmon Gap Visitor Center, when open; a self-permitting station is also located at Stillwell Store, 5 miles south on FM2627 on the way to La Linda, Mexico. Permits for floating Santa Elena Canyon may be obtained at the Barton Warnock Center in Lajitas. Only permits for Santa Elena Canyon may be written there. However, we encourage all parties to get their permits at a park visitor center when possible, to obtain the most up-to-date river information and conditions.

River guide booklets are available for purchase at park visitor centers. If you would like to order them in advance of your trip, call the Big Bend Natural History Association at (915) 477-2236 or visit their online internet bookstore at [www.bigbendbookstore.org](http://www.bigbendbookstore.org)





Inside The Park (915)			Outside The Park (915)			
<b>EMERGENCY</b>		<b>911</b>				
<b>National Park Service</b>			<b>Lodging</b>		<b>Medical Services</b>	
General Information	477-2251		Badlands Motel, Lajitas	424-3471	Terlingua Medics	371-2222
<b>Big Bend Natural History Association</b>			Big Bend Motor Inn, Study Butte	800-848-BEND	Big Bend Family Health Center, Study Butte	371-2661
Booksales & Seminars	477-2236		Easter Egg Valley Motel, Study Butte	371-2254	Lajitas Infirmary	424-3536
<b>Visitor Centers &amp; Ranger Stations</b>			El Dorado Motel, Terlingua	371-2111	<b>Banks</b>	
Castolon Ranger Station	477-2225		Gage Hotel, Marathon	386-4205	Quicksilver Bank & ATM, Study Butte	371-2211
Chisos Basin Visitor Center	477-2264		Heath Canyon Ranch Inn, FM 2627	376-2235	<b>Kennels</b>	
Panther Junction Visitor Center	477-1158		Longhorn Ranch Hotel, Hwy. 118	371-2541	Terlingua Creek Kennels, (Oct-Apr)	371-2348
Persimmon Gap Visitor Center	477-2393		Marathon Motel, Marathon	386-4241	<b>Guide Services</b>	
Rio Grande Village Visitor Center	477-2271		Terlingua Ranch Resort	371-2416	Big Bend Touring Society, Terlingua	371-2548
<b>Lodging</b>			<b>Camping</b>		Texas Jeep Expeditions	877-839-JEEP
Chisos Mountains Lodge	477-2291		Big Bend Motor Inn, Study Butte	800-848-BEND	Texas Jeep Rentals, Terlingua	877-839-JEEP
	477-2292		Big Bend Ranch State Park, Lajitas	424-3327	<b>Rio Grande Float Trip Outfitters/Rentals</b>	
<b>Restaurants</b>			Big Bend Travel Park, Study Butte	371-2250	Big Bend River Tours, Study Butte	800-545-4240
Chisos Mountains Lodge	477-2291		Lajitas on the Rio Grande	424-3471	Desert Sports, Terlingua	888-989-6900
<b>Park Gasoline Service</b>			Longhorn Ranch, Study Butte	371-2541	Rio Grande Adventures, Study Butte	800-343-1640
Panther Junction (also diesel)	477-2294		Ocotillo Mesa RV Park, Study Butte	800-729-1406	TX River Expeditions, Study Butte	800-839-7238
Rio Grande Village (also diesel)	477-2293		Stillwell's Trailer Camp, FM 2627	376-2244	<b>Horseback Riding</b>	
<b>Campground Stores</b>			Study Butte RV Park	371-2468	Big Bend Stables, Study Butte	800-887-4331
Rio Grande Village	477-2293		Terlingua Ranch Resort	371-2416	Lajitas Stables, Lajitas	424-3238
Chisos Basin	477-2291		<b>Gas Stations &amp; Grocery Stores</b>		Spring Creek Remuda, 23 mi. south of Marathon	376-2260
Castolon	477-2222		Big Bend Motor Inn (gas, diesel)	800-848-BEND	Ben's Hole Creek Ranch, Terlingua	371-2954
			Lajitas Trading Post (gas, supplies)	424-3234		
			Study Butte Store (gas/diesel/groceries)	371-2231		
			Stillwell Store & Station (gas)	376-2244		



Let Safety Be Your Constant Companion

Big Bend is unfamiliar country to most visitors yet it need not be dangerous. Whether hiking the highcountry, rafting the Rio Grande, observing wildlife, or simply driving the scenic roads of this wilderness park, let safety be your constant companion. Spend a moment reviewing these common safety concerns so that you may have an enjoyable visit.

Driving

Many accidental deaths in Big Bend result from car accidents. While driving is a great way to see the park, it can also be dangerous, particularly if you are tired or are going too fast. Drive within the speed limit, 45 mph maximum in the park, and watch for javelina, deer, and rabbits grazing along road shoulders, especially at night. Seat belts are required at all times. Remember, too, that you share the road with bicyclists and pedestrians. Some park roads, such as the road into the Chisos Mountains Basin, are steep and winding and require extra caution. The Basin Road is not recommended for RVs over 24 feet or trailers over 20 feet. Finally, always select a designated driver before drinking alcoholic beverages.

Heat

Desert heat can kill you. Carry plenty of water (at least one gallon per person, per day) and wear a hat, long pants, long-sleeved shirt, and sun screen when hiking. Springs are unreliable and often dry up for a portion of the year, despite what maps indicate. Avoid hiking during mid-day in summer; travel as wild animals do, in the early morning or late evening hours rather than during the heat of the day.

Mountain Lions

Big Bend is mountain lion country, especially the Chisos Mountains. While lion attacks are rare, three have occurred in the last 10 years. Should you encounter an aggressive mountain lion, hold your ground, wave your arms, throw stones, and shout. Never run. Keep groups together and consider hiking elsewhere with young children if you come across a special mountain lion warning sign posted at a trailhead.

Desert Wildlife

Black bears, javelinas, skunks, coyotes, and raccoons frequent Big Bend's campgrounds. Although they sometimes appear tame, all of the animals in the park are wild, and could pose a threat to your health and safety if you attempt to approach or feed them. Never feed any of Big Bend's wildlife. To prevent these creatures from becoming habituated to people, store all food, coolers, cooking utensils, and toiletries in a hard-sided vehicle, preferably in the trunk of your car. Food storage lockers are available for hikers and campers in the Chisos Mountains. Dispose of garbage properly. At the Chisos Basin Campground, throw away garbage in the special bear-proof dumpsters and trash cans provided. Remember to report all bear or lion sightings to a ranger.

Hiking

Exploring this desert and mountain country on foot requires both mental and physical preparation. Trails vary from well maintained in the Chisos to primitive and barely visible in the desert. Plan hikes within your ability. Take along a map and compass and know how to use them. Flash floods may occur following thunderstorms so avoid narrow canyons or dry washes. Stay low and avoid ridges during thunderstorms. Carry a flashlight and a first aid kit. Let someone know where you're going and when you expect to return. If you get hurt or lost, stay in one place to conserve water and energy. Signal for help; three blasts on a whistle is a well-recognized distress call. In remote areas, a large "X" marked on the ground by any means visible from the air will signify that help is needed. Carry a signal mirror. Remember to obtain a free backcountry use permit before heading out overnight.

Fire

Fire danger is always an important safety consideration in Big Bend. Wood or ground fires are not permitted in the park, and you must exercise caution in the use of gas stoves, charcoal grills, and cigarettes. Big Bend has experienced drought conditions in the past several years and some restrictions may apply to the use of these heat sources. Check with a ranger for the latest information about fire safety in the park.

Swimming

Hot weather makes the muddy Rio Grande look very inviting, but swimming is not recommended. Water borne micro-organisms and other waste materials can occur in the river and cause serious illness. The river can be hazardous, even in calm-looking water. Strong undercurrents, deep holes, and shallow areas with sharp rocks and large tree limbs are common and make the Rio Grande unsafe for swimming. If you do choose to swim, wear a life jacket and avoid alcohol.

Poisonous Animals

Venomous snakes, scorpions, spiders, and centipedes are all active during the warmer months. Inspect shoes and sleeping bags or bedding before use and always carry a flashlight at night. While snake bites are rare, they usually occur below the knee or elbow. Pay attention to where you walk and place your hands.

Big Bend truly is wild country. In fact, many people visit precisely because it is so remote and rugged. But remember, as you enjoy the splendor of this great wilderness area, to make safety a priority. By giving forethought to your actions you can have a safe, exciting, and rewarding vacation in Big Bend National Park.

### Keep The Wild in Wildlife!

*Javelina are wild and can be dangerous...*



## Never Feed Javelina!




*Regulations are strictly enforced!*

## How Hot?

	Avg.High/Low	Avg.Rainfall"
January	61/35	.46
February	66/34	.34
March	77/45	.31
April	81/52	.70
May	88/59	1.50
June	94/66	1.93
July	93/68	2.09
August	91/66	2.35
September	86/62	2.12
October	79/53	2.27
November	66/42	.70
December	62/36	.57
yearly average:	79/47	15.34"

Temperatures in the Chisos Basin vary 5-10 degrees below these readings, while daytime temperatures along the Rio Grande average 5-10 degrees warmer.



### Pet Owners

Keep your pet on a leash (or in a cage) at all times. Pets are not allowed on park trails, or anywhere off established roadways. Pets may not be left unattended in the park.

**Predators such as owls, coyotes, javelina, and lions CAN and DO kill pets here.** Even large dogs cannot defend themselves against such predators.

Remember, desert heat is **deadly**. Do NOT leave your pet alone in a vehicle. Pets are not allowed on trails, off roads, or on the river. The nearest kennels service is in Terlingua, 30 miles away.



National Park Service  
U.S. Department of the Interior

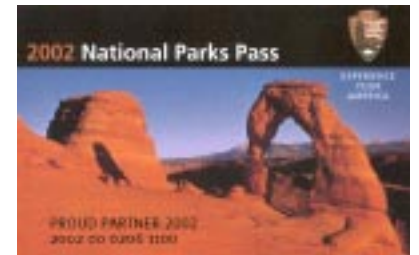
Big Bend National Park  
PO Box 129  
Big Bend, TX 79834  
www.nps.gov/bibe



Big Bend Natural History Association  
PO Box 196  
Big Bend National Park, TX 79834  
www.bigbendbookstore.org

EXPERIENCE YOUR AMERICA...

Buy a  
**National Parks Pass**



With the establishment of Yellowstone National Park in 1872, the United States created the world's first national park. Today, nearly 400 National Park Service sites celebrate our nation's natural and cultural heritage. From mountains to mangroves, from seashores to cliff-dwellings, the National Park Service is the steward of our resources and teller of our stories.

The National Parks Pass costs just \$50, and covers entrance fees at all National Park Service sites for 12 months from date of purchase.

Already paid your park entrance fee? You may exchange your current, valid entry receipt and apply it towards the purchase of a National Parks Pass.

EXPERIENCE YOUR AMERICA

# Join Our Family



*Please accept our  
invitation to join the  
Big Bend Natural  
History Association*

The Association's goal is to educate the public and increase their understanding and appreciation of the Big Bend Area and what it represents in terms of our historical and natural heritage. You can be an important part of this effort when you become a member.

BBNHA was founded in 1956 to aid educational, historical, and scientific programs for the benefit of Big Bend and its visitors.

## Your Benefits as a Member

- A 15% discount on items sold by BBNHA
- A 10% discount on most seminars
- A subscription to *The Big Bend Paisano*
- Current Big Bend calendar
- Discounts at many other association bookstores in visitor centers at other national park sites
- Opportunity to support scientific, educational, and historical programs in Big Bend

## Past and present projects include:

- Operate book sales outlets in Big Bend National Park and Amistad National Recreation Area
- Publish trail guides and brochures and assist with the publication of *The Big Bend Paisano*
- Sponsor an on-going Seminar program
- Provide annual grants for research projects and administer grants and gifts received for the park
- Support the park's volunteer, Junior Ranger, and educational outreach programs

*Please enroll me as a  
member of BBNHA*

### ANNUAL DUES

\_\_\_ Individual (\$25)    \_\_\_ Associate (\$50)  
\_\_\_ Corporate (\$100)

### LIFE MEMBERSHIP

\_\_\_ Individual or Family (\$250)  
\_\_\_ Corporate (\$500)  
\_\_\_ Benefactor (\$1,000)

\_\_\_ New Member    \_\_\_ Renewal

Mr./Ms./Mrs. \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State/ZIP \_\_\_\_\_

Make check payable to BBNHA or charge to:

\_\_\_ Visa    \_\_\_ Mastercard    \_\_\_ Discover

Card No. \_\_\_\_\_ Exp. Date \_\_\_\_\_

Signature \_\_\_\_\_

### DETACH AND MAIL TO:

BBNHA, P.O. Box 196

Big Bend National Park, Texas 79834

Telephone: (915) 477-2236

e-mail: bibe\_bbnha@nps.gov